

Amendments to the Claims

The following Listing of Claims replaces all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A method for creating a ~~sloped~~ via contact from a microelectronic device on a front side of a wafer to a back side of the wafer ~~having front and back sides~~, comprising:

~~providing a contact on the front side of the wafer;~~

~~forming a sloped via in the wafer under the front contact~~ a via defined by sidewalls and extending through the wafer from a contact of the microelectronic device to the back side of the wafer, wherein the via has a width of at most 80 μ m and at least a portion of the via has sloped sidewalls and a width that increases with distance through the wafer, ~~the sloped via increasing in width;~~

~~coating the sidewalls~~ walls of the ~~sloped~~ via with conductive material; and

~~providing a contact forming~~ on the back side of the wafer a back contact that is ~~[[,]]~~ electrically connected to the contact of the microelectronic device ~~front contact~~ through the conductive material coating the sidewalls of the sloped via.

Claim 2 (canceled)

Claim 3 (currently amended): The method of claim 1 ~~[[2]]~~, wherein the width of the via is at most ~~sloped via is no wider than~~ 50 μ m.

Claim 4 (currently amended): The method of claim 1 ~~[[2]]~~, wherein the coating of the sidewalls ~~walls~~ leaves a coating of conductive material ~~in the sloped via~~ at least 1000 Angstroms thick on the sidewalls where the via width is ~~the~~ narrowest.

Claim 5 (original): The method of claim 4, wherein the conductive material is selected from the group consisting of NiChrome and gold.

Claim 6 (currently amended): The method of claim 4, wherein the coating of the sidewalls ~~walls~~ includes plating.

Claim 7 (currently amended): The method of claim 1 [[2]], wherein the forming of the a-sloped via comprises ~~includes~~:

forming in the wafer a preliminary via with a substantially constant width; and
widening at least a portion of the preliminary via to form the portion of the via having sloped sidewalls ~~so that its width increases from front to back~~.

Claim 8 (currently amended): The method of claim 7, wherein the forming of the [[a]] via comprises etching the wafer with ~~includes using~~ a deep reactive ion etching (DRIE) process.

Claim 9 (currently amended): The method of claim 8, wherein the forming of the [[a]] via comprises etching the wafer from only one of the front and back sides of the wafer ~~includes using a one-sided etch~~.

Claim 10 (currently amended): The method of claim 8, wherein the forming of the [[a]] via comprises etching the wafer from both the front and back sides of the wafer ~~includes using a two-sided etch~~.

Claim 11 (currently amended): The method of claim 7, wherein the widening of the via comprises etching the wafer with ~~includes using~~ an isotropic plasma etch.

Claims 12-22 (canceled)

Claim 23 (new): The method of claim 1, wherein the forming of the via comprises forming the portion of the via having sloped sidewalls with a width that increases from the contact of the microelectronic device to the back side of the wafer.

Claim 24 (new): The method of claim 1, wherein the portion of the via having sloped sidewalls extends from the contact of the microelectronic device to the back side of the wafer.

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Page : 4 of 9

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Claim 25 (new): The method of claim 1, wherein the via has a non-sloped portion.

Claim 26 (new): The method of claim 1, wherein the portion of the via having sloped sidewalls varies linearly with distance through the wafer.

Claim 27 (new): The method of claim 1, wherein the portion of the via having sloped sidewalls varies nonlinearly with distance through the wafer.